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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750,822	01/05/2004	Kazuto Ikemoto	396.43366X00	1645

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EXAMINER
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LE, HOA VAN

ART UNIT	PAPER NUMBER
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1752

DATE MAILED: 06/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/750,822

Applicant(s)

IKEMOTO, KAZUTO

Examiner

Hoa V. Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 May 2005.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-17 with respect to the elected and applied species is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☒ Claim(s) 1-17 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 05 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

This application is before the examiner for consideration on the merits.

- I. This is in response to Papers filed on 02 May 2005.
- II. Applicant elects ethanolamine, isopropanolamine, dimethyl sulfoxide, citric acid species being acknowledged.
- III. The elected species have been considered and searched. The consideration and search are extended to the applied species. Other have not been considered, searched or examined until all of the elected and applied species are overcome.
- IV. In view of the arguments, the restriction on the record is withdrawn. However, the product is known to be used as disinfectants (Nosler et al in Patent No. 3,625,644).
- V. On page 3 of the instant specification, "Chemical review, vol.126 (1939) p297-338" is not found. It may be --- Chemical review, vol.26 (1940) p297-338--- with "A SUMMARY OF THE REACTIONS OF ALDEHYDES WITH AMINE" that is not applied because there is no teaching or suggestion of a reaction product of an aldehyde and an alkanolamine in a molar ratio of 0.8 or less as claimed. Please check and make a proper and timely correction or provide its copy for a timely consideration since it is an essential and pertinent to the instant claims as disclosed on the record.

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VI. On page 3 of the specification, Japanese Patent No. 46-26903 has its English language equivalent to Patent No. 3,625,644 to Nosler et al. Patentees disclose, teach and suggest a reaction product of an aldehyde and an alkanolamine in a molar ratio of 9:10 which is higher than that of from 8 or less to 10 in the instant claims. Therefore, it is not applied against the claims.

VII. On page 3 of the specification, Soviet Patent No. "1534029" is disclosed to be essential and pertinent to the instant claims. Accordingly, an English language of a pertinent portion or English language equivalent is requested to be submitted for a timely consideration.

VIII. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-10 and 14-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The language "or less" include zero as broadly claimed. There is no evidence on the record that the claimed "reaction product" is produced with zero amount of formaldehyde. At the level of one skilled in the art, it has a reason to be believed that the "agent" contains an "alkanolamine". Accordingly, claims 1-10 and 14-1 are reasonably read on the "agent" containing "alkanolamine" as broadly allowed and required by the Office. Applicant should show or provide an evidence to the contrary for the record.

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IX. Claims 11-13 have some positive limitations with respect to the “reaction product” than those of the rejected claims 1-10 and 14-17 in paragraph “VIII” above. However, claims 11-13 have and are given little patentably different or distinctive values over those in claims 1-10 and 14-17 since an amount of the newly obtained compound could be in an infinitesimal amount in the claimed “agent” as broadly allowed and required to read by the Office. There is no evidence on the that such infinitesimal amount of the newly obtained compound would be able to provide an unusual or unexpected result over a known stripping “agent” containing an alkanolamine in a stripping process. One having ordinary skill in the art would be expected that alkanolamine and its reactant product would have about the same stripping property since they share about the same chemical elements and structure Applicant should show or provide an evidence to the contrary for the record.

X. For the reasons set forth in paragraph “VIII” above, the following rejection is made:

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10 and 14-15 are rejected under 35 U.S.C. 102(a) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Koito et al (6,869,921).

Koito et al disclose and teach an aqueous tripping composition comprising a sufficient amount of an alkanolamine, a sufficient amount of an alkaline compound, a sufficient amount of an organic solvent, a sufficient amount of an anticorrosive compound, a sufficient amount of water. . Please see the whole disclosure of the applied reference, especially at col.7:17 and 39, 6:8-19, 9:55, 10:30-31, Table 9 with respect to triazole containing anticorrosive compounds.

The language “or less” has been considered as it includes zero as broadly claimed. There is no evidence on the record that a new compound is obtained with a broadly claimed “agent” with an alkanolamine alone or with no formaldehyde.

In addition, the above claims are related to a product-by-process. Accordingly, their patentability is on a product (“agent” with an alkanolamine alone or with no formaldehyde as broadly claimed) as set forth in MPEP 2113 until applicant could be able to show that the claimed processing step is actually obtained a patentably distinct product as broadly claimed with an alkanolamine alone or zero amount of formaldehyde.

Koito et al do not specify a reaction product or “agent” with an alkanolamine alone or zero amount of formaldehyde as claimed. However, there is no evidence on the record that a new compound is obtain with an alkanolamine alone or no amount of formaldehyde as broadly claimed. As the level of one skilled in the art, it has a reason to believe that no new compound is obtain in the broadly claimed “agent” with an alkanolamine alone or zero amount of formaldehyde in the absence of convincing evidence to the contrary.

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Since Koito et al is reasonably disclosed and taught the claimed embodiments as broadly disclosed, the above claims are found to be anticipated by Koito et al or in the alternative of obviousness by Koito et al suggestions.

XI. For the reasons set forth in paragraphs "VIII" and "IX" above, the following rejection is made:

Claims 11-13 are rejected under 35 U.S.C. 103(a) as obvious over Koito et al (6,869,921).

Koito et al disclose and teach an aqueous tripping composition comprising a sufficient amount of an alkanolamine, a sufficient amount of an alkaline compound, a sufficient amount of an organic solvent, a sufficient amount of an anticorrosive compound, a sufficient amount of water. . Please see the whole disclosure of the applied reference, especially at col.7:17 and 39, 6:8-19, 9:55, 10:30-31, Table 9 with respect to triazole containing anticorrosive compounds.

A. The language "or less" includes an infinitesimal amount of formaldehyde. At the level of one skilled in the art, it has a reason to believed that no or an infinitesimal amount of new compound is actually obtained. Accordingly, the broadly claimed "agent" contains an alkanolamine actively chemical stripping ingredient and mostly water as broadly allowed and required to read by the Office.

B. In addition, the above claims are related to a product-by-process. Accordingly, their patentability is on a product (the broadly claimed "agent" with an infinitesimal amount of new compound, an amount of alkanolamine and mostly water as broadly allowed and required to read by the Office) as set forth in MPEP 2113 until applicant could be able to show a convincing

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evidence that the claimed processing step is actually obtained a sufficient amount of the newly obtained compound in the broadly claimed “agent” in order for it to be able to provide an unusual or unexpected result over the applied stripping composition containing about the same amount of an alkanolamine actively chemical stripping ingredient since it has reason to believe that an alkanolamine and its newly related and obtained compound would have about the same or substantially the same active stripping property to one having ordinary skill in the art because they share about the same alkanolamine elements and structure, such as  $(\text{HOC}_n\text{H}_{2n})_3\text{N}$  and  $\text{COH}_2$  to give  $(\text{HOC}_n\text{H}_{2n})_2\text{NC}_n\text{H}_{2n}\text{OCH}$  and  $\text{H}_2\text{O}$ .

Koito et al do not specify a new compound as that in the claims. It has reason to believe that (1) it is in an infinitesimal amount as broadly claimed as clearly pointed out in paragraph “A” above and (2) there no evidence of unusual or unexpected result for such tiny amount and it would have about the same active tripping property as that of alkanolamine reactant as clearly pointed out in paragraph “B” above in the absence of convincing evidence to the contrary for the patentability of the claims. The showings in the application have been considered and carefully studied but are not found to be convincing because they much broader than those in the claims.

Since the claims are related to product-by-process, the patentability of the claims is on the product or “agent”. The above claims are found to be rendered prima-facie obvious by Koito et al because there is no evidence on the record that the broadly claimed “agent” could be able to provided an unusual or unexpected result over those in Koito et alas clearly pointed out and set forth on the record.



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XII. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 9-11, 14 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Gatlin (5,486,605).

Gatlin discloses and teaches a reaction product of an formaldehyde and hindered amine being selected from an alkanolamine. Please see col.3:47-51, 4:3-8, 39-5 and 49-60, 5:7 and 9-11, 6: 1 and 9. The intended use with respect to “photoresist stripping” in the preamble of the claims has no value in the above applied statutory.

Gatlin does not exactly specify “ formaldehyde and an alkanolamine in a molar ratio of 0.8 or less”. However, Gatlin discloses and teaches that a molar ratio of the alkanolamine is used in an excess amount of that of the formaldehyde for the desired reaction to take place at 49 °C or below and pH at up to 12 on col.6:11-22. Accordingly, it has reasons to believe that the claimed ratio could be at 0.8 or less and the reaction product could be the same in the absence of an evidence to the contrary for the patentability of the claims.

Since Gatlin is reasonably disclosed and taught the claimed embodiments, the above claims are found to be anticipated by Gatlin.

IX. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 12 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Gatlin (5,486,605).

Gatlin discloses, teaches and suggests a reaction product of an formaldehyde and hindered amine being selected from an alkanolamine. Please see col.3:47-51, 4:3-8, 39-5 and 49-60, 5:7 and 9-11, 6: 1 and 9. The intended use with respect to “photoresist stripping” in the preamble of the claims has been considered but has no patentable value in a process of making a reaction product or a product-by-process since the reaction product has a different and distinct utility as clearly pointed out and set forth on the record the above paragraph “IV” above and the patentability of a product-by-process is on a product until applicant could be able to show or provide a convincing evidence that the claimed process would be actually made a patentably distinct product from the applied product on the record.

Gatlin does not exactly specify “ formaldehyde and an alkanolamine in a molar ratio of 0.8 or less”. However, Gatlin discloses, teaches and suggests that a molar ratio of the alkanolamine is used in an excess amount of that of the formaldehyde for the desired reaction to take place at 49 °C or below and pH at up to 12 on col.6:11-22. Accordingly, it has reasons to believe that the claimed ratio could be obviously close 0.8 or less and the reaction product could be the same or obviously or substantially the same in the absence of an evidence to the contrary for the patentability of the claims.

Gatlin does not specify the reacting embodiments as those in the product-by-process claim 12. However, the patentability of a product-by-process is on a product until applicant could be able to show or provide a convincing evidence that the claimed process would

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be actually made a patentably distinct product for the record to overcome the applied product on the record. There is no convincing evidence on the record that the claimed process would be actually made a patentably distinct product to overcome the applied product. Accordingly, the applied product is pertinent. Please see MPEP 2113.

Since Gatlin is reasonably disclosed, taught and suggested the claimed reaction product or its obviously or essentially the same product, claim 12 is found to be rendered prima-facie obvious by Gatlin for citing some reacting embodiments in a product-by-process claim with no convincing evidence that the claimed process is actually made a patentably distinct product for the record in order to overcome the applied product on the record.

X. Claims 1-2, 5-6, 9 and (10 with "100% by weight of the reaction product as broadly claimed"), 11, 14 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Dillon (4,978,512).

Dillon discloses and teaches a reaction product of an formaldehyde and an alkanolamine from 1-6 carbon atoms in a molar ratio of from 0.25:1. The reaction product is taken place at 130 to 150 °F. Please see col.4:16-24 and 42-45, 5:12-25. The intended use with respect to "photoresist stripping" in the preamble of the claims has no value in the above applied statutory.

Since Dillon is reasonably disclosed and taught the claimed embodiments, the above claims a found to be anticipated by Dillon.

XI. Claim 12 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Dillon (4,978,512).

Dillon discloses and teaches a reaction product of an formaldehyde and an alkanolamine from 1-6 carbon atoms in a molar ratio of from 0.25:1. The reaction product is taken place at 130 to 150 °F. Please see col.4:16-24 and 42-45, 5:12-25. The intended use with respect to “photoresist stripping” in the preamble of the claims has no value in the above applied statutory. The intended use with respect to “photoresist stripping” in the preamble of the claims has been considered but has no patentable value in a process of making a reaction product or a product-by-process since the reaction product has a different and distinct utility as clearly pointed out and set forth on the record the above paragraph “IV” above and the patentability of a product-by-process is on a product until applicant could be able to show or provide a convincing evidence that the claimed process would be actually made a patentably distinct product from the applied product on the record.

Dillon does not specify the reacting embodiments as those in the product-by-process claim 12. However, the patentability of a product-by-process is on a product until applicant could be able to show or provide a convincing evidence that the claimed process would be actually made a patentably distinct product for the record to overcome the applied product on the record. There is no convincing evidence on the record that the claimed process would be actually made a patentably distinct product to overcome the applied product. Accordingly, the applied product is pertinent. Please see MPEP 2113.

Since Dillon is reasonably disclosed, taught and suggested the claimed reaction product or its obviously or essentially the same product, claim 12 is found to be rendered prima-facie obvious by Dillon for citing some reacting embodiments in a product-by-process claim with no

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convincing evidence that the claimed process is actually made a patentably distinct product for the record in order to overcome the applied product on the record.

XII. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoa V. Le whose telephone number is 571-272-1332.

The examiner can normally be reached from 6:30 AM to 4:30 PM on Monday through Thursday and about the same time of most Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on 571-272-1526.

Applicants may file a paper by fax with a central facsimile receiving number 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hoa V. Le  
Primary Examiner  
Art Unit 1752

HVL  
23 May 2005

HOA VAN LE  
PRIMARY EXAMINER

*Hoa Van Le*